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From

# Request to the Postal Regulatory Commission under 39 USC 3642<sup>1</sup> & 39 CFR 3020.50 to add Private Address Forwarding to the Mail Classification Schedule

As a user of the mail, I respectfully request that the Postal Regulatory Commission (PRC) add Private Address Forwarding (PAF) to the market dominant list as a special service.

To the best of my knowledge, I am the first person to have ever filed a request under this statute. Although I am not a lawyer, I have done my best to address all of its requirements here. I respectfully request the Commission's leniency on any points I may have fulfilled inadequately, and mutual cooperation as we explore the first use of this important new mechanism for ordinary citizens to propose improvements in mail service.

I would also like to say upfront that my proposal here is in no way meant to challenge the USPS' primary role in determining its services; I am simply using the only avenue for proposing a new service that I see in the law. I would be happy to work together with the USPS, PRC, and any other concerned parties in perfecting this proposal. I offer the following as a working draft, with the expectation that others will have major input on its final form.

# Proposal for Private Address Forwarding<sup>2</sup>

1505.23 Private Address Forwarding

#### 1505.23.1 Description

- 1. Private Address Forwarding (PAF) is a service that forwards mail addressed to a unique PAF identifier (PAF ID) to the physical address specified by the owner of that PAF ID ("PAF customer").
  - a. Mail may be addressed simply to e.g. "PAF 13JS-00EG-C(, United States)".
    - The USPS shall designate stand-in city, state, and ZIP code values to be used with PAF IDs in legacy systems that require those values to address mail — e.g. "PAF 13JS-00EG-C, Privacy, DC 09900, United States".
  - b. On receipt, the USPS will look up the PAF ID's forwarding address, add a standard mail forwarding sticker to the parcel, and then continue processing it as any normally addressed mail.
    - i. Ideally, the mail forwarding sticker should overlay and obscure the underlying PAF ID, to protect the privacy of the PAF customer by deterring people from seeing that a given PAF ID corresponds to a given forwarding address.
    - ii. If the PAF ID does not exist, the PAF customer has canceled it, or its checksum is invalid, the mail should be returned to sender with an indication of why the specified PAF ID is invalid.
- 2. Any person (except as per section (b) below) who controls a deliverable mail address in the United States (whether residential, commercial, or PO Box) may apply for a PAF ID by making an application to the USPS.
  - a. The application shall require the customer's legal name, desired initial forwarding address, and PAF fee, as

<sup>&</sup>lt;sup>1</sup> "Upon request of ... users of the mails ... the Postal Regulatory Commission may change the list of market-dominant products under section 3621..."

<sup>&</sup>lt;sup>2</sup> 39 CFR 3020.51(e) requests that I provide this proposal in the format and context of an amendment to the Mail Classification Schedule.

- well as a statement under perjury that they will not use the PAF in a prohibited manner (e.g. per section (c) below). A customer's first PAF ID application shall also require a postal employee to personally verify the customer's name and address by adequate government-issued documentation (e.g. driver's license, passport, certificate of incorporation, etc).
- b. On accepting the customer's initial PAF ID application, USPS shall issue the PAF customer a username and password, by means of which they can manage their PAF service online (e.g. to update the address, pay fees, cancel a PAF ID, register a new PAF ID, etc).
- c. The USPS shall refuse PAF service to customers who have:
  - i. been documented to abuse PAF (e.g. companies or principals thereof that have used PAF IDs to deter service of process, people who have used a PAF ID as part of a crime of which they have been convicted, etc)
  - ii. a legal responsibility to disclose their physical location (e.g. government entities and agents for service of process)
  - iii. been convicted of mail fraud, identity theft, or abuse of legal process (e.g. being determined a vexatious litigant, having a legal bar license revoked, etc)
- d. Third parties (e.g. DMV, voter registration organizations, etc) may choose to refuse to accept PAF addresses if they have a compelling reason to know the actual physical location of the customer or to send mail via a non-USPS carrier. Third parties should not refuse to accept PAF addresses if their need for the customer's address is to send mail to their customer and USPS' postal services are adequate for that purpose.
- 3. A PAF customer may have as many distinct PAF IDs as they want, so long as they pay a fee for each PAF ID and do not abuse the service. (For instance, a PAF customer may wish to have distinct IDs for personal and business mail, to prevent third parties from knowing that the two IDs belong to the same person.)
- 4. The PAF ID is a unique, random, alphanumeric identifier.
  - a. For privacy reasons, the PAF ID must not be issued in sequential order, and must not implicitly disclose any information about the PAF customer. For instance, PAF IDs must not have some substring that indicates the post office (or region) in which the PAF application was made.
  - b. PAF IDs should be created as Base32-Crockford encoded<sup>3</sup>, securely random 40-bit integer<sup>4</sup>, plus a Base32-Crockford encoded CRC-5 checksum, with an optional dash every 4 characters e.g. 13JS-00EG-C. Being based on a random number prevents any privacy leak from the ID itself; the size makes it impossible to guess. Base 32-Crockford encoding excludes visually confusable characters while still maintaining a relatively compact, case insensitive format, as well as a checksum to prevent typos<sup>5</sup>. At only 9 characters (plus optional dash), it is still compact and easy to use.
- 5. The PAF ID must be issued by and maintained in a central, nationwide USPS database. Each record in the database should contain:
  - a. the (globally unique) PAF ID(s) of the PAF customer
  - b. dates of assignment, updates, cancellation, payment, etc
  - c. current & historical legal name(s) of PAF customer<sup>6</sup>
  - d. type and ID numbers of identifying documents verified by postal employees, and the identity of the employee who verified them
  - e. current & historical forwarding addresses
- 6. The PAF customer can at any time visit a US Post Office and, by again presenting ID verification, request that a PAF ID they control be forwarded to a new destination address. They should also be able to change their forwarding

<sup>&</sup>lt;sup>3</sup> See RFC 4648 § 6 ( http://tools.ietf.org/html/rfc4648) for standard Base32; http://www.crockford.com/wrmg/base32.html for Crockford's variant

<sup>&</sup>lt;sup>4</sup> This is notionally similar to a UUID (RFC 4122 § 4.4, http://tools.ietf.org/html/rfc4122), though smaller for usability, and therefore gauranteed unique only by use of a central issuing server (rather than by pure improbability).

<sup>&</sup>lt;sup>5</sup> The checksum can be used to notify mailers of the difference between a nonexistent or cancelled PAF ID and a mistyped one, and to enable them to verify at least the formal validity of a PAF address (like the Luhn algorithm does for credit card numbers)

<sup>&</sup>lt;sup>6</sup> "historical" i.e. in case of legal name change

address online, in a manner similar to what is used currently for mail forwarding, using the credentials provided per 2(b) above.

- a. A PAF customer should be able to briefly suspend mail forwarding i.e. to direct the USPS to hold all mail for a short period to cover periods where they do not have a predictably stable receiving address, e.g. during a complicated move or extended travel. There may be an additional charge for this service, since it requires the USPS to pay for temporary storage space at mail sorting facilities.
- 7. The identity or forwarding address of a PAF customer must not be disclosed to any person, except for USPS employees who have an actual need to know (e.g. because they are manually processing incoming mail addressed to a PAF ID), except:
  - a. by a subpoena which can be anonymously contested by the PAF customer and for which the PAF customer has adequate notification,
  - b. by a properly obtained pen register warrant to secretly disclose that information where necessary for a criminal investigation, or
  - c. by the PAF customer's explicit, opt-in, specific consent, e.g. to permit a third party mail carrier (UPS, FedEx, etc) to service their PAF-addressed mail
    - i. In such cases, the third party must sign a nondisclosure agreement prohibiting them from disclosing or storing the released information except to the extent necessary to provide the service for which the information was disclosed, enforceable both by the PAF customer and the USPS.
    - ii. The USPS should provide an API for registered third parties both to obtain permission from a PAF user for access to their information and to determine the current forwarding address of a user who has granted such access.
- 8. The cost to ship to a PAF customer must not vary depending on their location<sup>7</sup>, as this would at least partially compromise the PAF customer's privacy. The cost, if it would normally vary by destination, should be set to the overall average cost to ship to PAF customers.
- 9. Valid PAF IDs should be permitted as adequate sender / return-to addresses, though PAF customers should be cautioned that sending mail in this way will compromise their privacy by revealing to the recipient the location of the post office that initially processed their mail.
  - a. The USPS may require senders using PAF IDs as their return address to list their PAF-registered name as well.<sup>8</sup>

1505.23.2 Prices9

The following would be initial pricing for PAF service. The prices should be updated yearly in accordance with 39 USC 3622(d)(1)(a).

Enrollment of first PAF ID \$35 (per year)

Enrollment of any subsequent PAF ID \$25 (per year)

Change of forwarding address of an extant PAF ID \$5 (one time)

Temporary hold of PAF mail \$5 per basket per week

Cancellation of a PAF ID \$0

#### **Mail Product Classification**

<sup>&</sup>lt;sup>7</sup> 39 USC 3622(b)(2)

<sup>8 39</sup> USC 3622(c)(13)

<sup>&</sup>lt;sup>9</sup> 39 CFR 3020.52(b)

39 CFR 3020.51(b,c) and 3020.52(a) ask that I indicate how PAF should be classified. Although I am more interested in this service being provided than how it is classified, and therefore I defer entirely to the USPS and PRC on this matter, I believe, based on reading the US Code specifications, that the following is correct:

Because PAF is based on adding a new option to the format of postal mail addressing in general, and because the USPS would need to maintain a centralized, private database of PAF ID destination addresses, this is a product for which the USPS would have a *de facto* monopoly<sup>10</sup>, and therefore constitutes a "market dominant" product<sup>11</sup>. PAF would be a product of "general applicability" (i.e. it would be available nationwide) and not a "special classification" (i.e. it would be available to all customers of the mail).

## Benefits & market value of PAF over existing services<sup>14</sup>

- 1. PAF would permit PAF customers to receive mail from third parties without disclosing their identity or physical address. This is extremely valuable for people who value their privacy<sup>15</sup> for any number of reasons e.g. people with stalkers, abusive ex-spouses, sensitive jobs, sensitive mail, etc..
- 2. Unlike PO boxes and private mailbox services, a PAF would not use up valuable and restricted physical space. It would potentially be much cheaper to provide<sup>16</sup> than PO box service, because it only requires a software-level difference in mail processing, rather than any physical service or maintenance of boxes, and does not require any physical space (whereas providing PO boxes require the USPS to pay for larger amounts of real estate).
  - PAF would also not require customers to visit their post office to receive mail, which is time consuming and can be prohibitive for people with disabilities or restricted time availability (e.g. people who have to work during USPS business hours).
  - PAF availability would reduce or eliminate the misuse of PO boxes for forwarding in violation of DMM 508 4.4.6.
- 3. PAF would permit PAF customers to keep the same PAF ID based mailing address indefinitely, even across multiple changes of physical address<sup>17</sup>. This would save on the costs<sup>18</sup> of repeatedly changing normal mail forwarding<sup>19</sup>, differentiating mail forwarding based on name and address<sup>20</sup> (to discern current from former residents), etc, especially for people who move frequently. It would provide overall economic benefits from mail customers from not having to update the address they have on file with every company they do business with<sup>21</sup> when they move (since as far as the mail sender is concerned, there is no change) thus saving significant amounts of time and money<sup>22</sup> for both the recipient and sender, as well as for the USPS in handling traditional mail forwarding.
- 4. PAF is completely compatible with credit card address based authentication<sup>23</sup>. Just as now, a credit card customer

<sup>&</sup>lt;sup>10</sup> Please note that this is only a *de facto* monopoly, i.e. market dominance. PAF would not come under the postal monopoly proper as defined in 18 USC 1696.

<sup>&</sup>lt;sup>11</sup> 39 USC 3642(b)(1)

<sup>&</sup>lt;sup>12</sup> 39 USC 3632(b)(2)

<sup>&</sup>lt;sup>13</sup> 39 USC 3622(10)

<sup>&</sup>lt;sup>14</sup> 39 USC 3622(c)(1)

<sup>&</sup>lt;sup>15</sup> 39 USC 3622(b)(7)

<sup>&</sup>lt;sup>16</sup> 39 USC 3622(b)(1)

<sup>&</sup>lt;sup>17</sup> 39 USC 3622(b)(2)

<sup>&</sup>lt;sup>18</sup> 39 USC 3622(b)(1)

<sup>&</sup>lt;sup>19</sup> 39 USC 3622(b)(6)

<sup>&</sup>lt;sup>20</sup> 39 USC 3622(c)(5)

<sup>&</sup>lt;sup>21</sup> 39 USC 3622(h)

<sup>&</sup>lt;sup>22</sup> 39 USC 3622(b)(1)

<sup>&</sup>lt;sup>23</sup> 39 USC 3622(c)(10)(b)

could notify their bank of their PAF address, then tell a merchant their PAF address and credit card details. The PAF address could be used by the merchant both to verify the credit card and to ship goods — so long as the goods are shipped via USPS, which would drive more service to the USPS<sup>24</sup>.

- 5. To the best of my knowledge, private parties do not currently offer an equivalent service to PAF<sup>25</sup>. The most similar services I am aware of that are offered by private parties are
  - a. private mailbox services (e.g. those provided by the "UPS Store" f/k/a "Mailboxes Etc."), to the extent that they arrange with their customer to forward mail
  - b. lawyers and agents for service of process, who arrange with their clients to privately forward mail

Of course, private carriers could develop their own PAF-type products further.

However, PAF IDs would necessarily be particular to each carrier, and carriers could not offer the same level of legal privacy guarantees to their users (as they are not bound by the same legal restrictions for disclosure or opening of mail as the USPS).

Private PAF-type services (unless run by a shipping company like UPS or FedEx) would also necessarily incur higher costs and delivery times than the USPS<sup>26</sup>, as they would have to first receive delivery at their business address and then ship parcels on to the customer, rather than shipping directly from the sender to the customer.

### Public comment provisions

I expect this proposal to be of interest to the general public, particularly those who are concerned with security and privacy, who will want to provide feedback to the Commission that takes into account the USPS' 28-day preliminary response under 39 CFR 3020.54. Therefore, I respectfully request that the Commission provide a period and method for public comment on this proposal under 39 CFR 3020.53(e) which would be adequate to permit the public to consider both this proposal and the USPS' response, and to comment in that context.

Specifically, I request that, to the extent possible,

- A. the Commission publish the USPS' response to this proposal in a manner easily accessible to the public immediately upon its receipt,
- B. the public comment period extend to 1 month after publication of the USPS' response (i.e. 2 months from the date of initial publication of this proposal),
- C. the PRC designate a specific e-mail address to which public comments on this specific proposal can be easily sent (without the public having to individually register for a PRC online filing account), and
- D. the PRC publish all public comments it has received to date at least once per week, together with some standard identifier for each comment, so that the public can respond to each others' comments.

## Conclusion

Please feel free to contact me if you have any questions or comments. The above should be regarded as only a draft standards proposal. My professional background includes security, privacy, and user experience work, not postal management and processing; accordingly, the concerns I express above as standards are primarily based on privacy, security, and usability, and I

<sup>&</sup>lt;sup>24</sup> 39 USC 3622(b)(5)

<sup>&</sup>lt;sup>25</sup> 39 CFR 3020.52(f)

<sup>&</sup>lt;sup>26</sup> 39 USC 3622(c)(9)

expect that concerns outside of my knowledge or expertise will need to be addressed before this proposal is finalized.

I would be happy to offer whatever assistance I can to the USPS and/or PRC based on my areas of expertise and vision for this new postal product.

For full disclosure, I would like to state that I have no financial or other stake whatsoever in the outcome of this proposal, other than that I am a US citizen interested in improving the USPS, and that I would myself use PAF when/if it is made available. I am in no way involved with any mail-related company other than as a customer, and am filing this proposal purely as a private user of the mails, in the public interest. My proposal is, to the best of my knowledge, wholly of my own invention.

Sincerely,

Sai

P.S. Please note that "Sai" is my full legal name; I am mononymic.